



**PATENT APPLICATION**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Thomas E. MULLAN et al.

Group Art Unit: 2617

Application No.: 10/658,776

Examiner: J. AJAYI

Filed: September 10, 2003

Docket No.: 116807

For: MOBILE AIRBORNE HIGH-SPEED BROADBAND COMMUNICATIONS  
SYSTEMS AND METHODS

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

A Notice of Appeal is attached. Applicants respectfully request review of the Final Rejection mailed August 9, 2007 in view of the arguments set forth in Applicants' September 14, 2007 Request for Reconsideration After Final Rejection ("Request") and in view of the Examiner's comments in the Advisory Action mailed October 16, 2007.

This review is requested specifically to address what Applicants believe is an improper construction regarding what the combination of U.S. Patent No. 6,201,797 to Leuca et al. (hereinafter "Leuca") and U.S. Patent Application Publication No. 2004/0192198 to Monteburno et al. (hereinafter "Monteburno") can reasonably be considered to have suggested with respect to the subject matter of the pending claims.

**I. The Office Action and the Advisory Action Misconstrue the Positive Teachings of Leuca in Attempting to Render Obvious Certain Features Recited in the Pending Claims**

The positively recited architecture of, for example, independent claim 1 regards a mobile communications terminal having a single first antenna, the mobile communications terminal

being mounted in a vehicle and in two-way communication with one or more individual terminal devices in the computer and with a satellite through the first antenna; and a base station in two-way communication with the satellite wherein a return link signal is transmitted from the first antenna of the mobile communications terminal via the satellite to the base station, and a forward link signal controlled by the base station is transmitted from the base station via the satellite and the first antenna to the mobile communications terminal. Independent claims 11 and 18 recite similar features.

A. The uplink in Leuca is not from the mobile communication terminal to the base station, but rather in the opposite direction. The Office Action cites col. 5, lines 4-8, discussing an uplink via a satellite system as allegedly corresponding to a return signal transmitted from the first antenna of the mobile communication terminal via the satellite to the base station, as is positively recited in Applicants' claims. The uplink signal of Leuca does not correspond to the return link signal of the pending claims as was argued on page 3, starting at line 9 of Applicants' Request. The Advisory Action indicates that Leuca discloses the data is requested by an airborne station/laptop and two-way communication also takes place between the laptop and the Internet via data mechanism. While this may be true, the asserted communication corresponding to Applicants' return link signal does not occur via any satellite disclosed in Leuca.

B. The Advisory Action addresses Applicants' arguments regarding NATS not being a satellite system. Applicants' arguments were based on the portion of Leuca referenced in the Office Action which asserts "(uplink is via a satellite system, NATS, col. 5, lines 4-8)." Col. 5, lines 4-8 of Leuca discusses NATS with no reference to any satellite system. The Advisory Action attempts to clarify the Office Action in view of Applicants' arguments indicating that NATS was allegedly "rather listed as one of the systems (which includes a satellite system) that can be used with Leuca's invention." This assertion, even if true, completely ignores the structure of Leuca's disclosed communication system, which does not include a satellite in the

communication path from the airborne platform to the base station. This confusion between NATS and a satellite system alone is enough to invalidate the asserted rejections in not being addressed to any features which can reasonably be considered to correspond to those recited in Applicants' claims.

C. The totality of the discussion in the Office Action and the Advisory Action regarding what the laptop of Leuca allegedly refers to requires misreading of Applicants' claims in a manner to attempt to make them fit the Leuca disclosure, or vice versa. Applicants recite a mobile communication terminal having a first antenna, the mobile communication terminal being mounted in a vehicle and in two-way communication with one or more data terminal devices in the vehicle. With reference to, for example, Fig. 1 of Leuca, it is clear that the plurality of airborne terminals 11 each are connected to a data server 12 by an internal data pipe in a well known manner. While broadly construed, the asserted laptop devices may have an antenna associated with them, they do not have a single first antenna. The September 14 Request specifically addressed the attempts at correspondence between any feature reasonably disclosed in Leuca and that recited in Applicants' claims. Applicants' arguments pointed out in instances such as this, and the two enumerated in A and B above, where the analysis of the Office Action failed.

D. It is irrelevant, as asserted in the Advisory Action, that two-way communication takes place in Leuca and the two-way communication involves using satellite. In Applicants' claims, each of the return link signal and the forward link signal is positively recited as being via the satellite. There is no corresponding two-way communication via a satellite disclosed in Leuca.

E. Each of Applicants' arguments beginning on page 3, line 10, and page 4, line 1, of Applicants' September 14 Request were specifically addressed to the rejections asserted in the Office Action. Each of Applicants' arguments specifically addressed why each of the allegedly corresponding features could not reasonably be considered to have suggested the allegedly

corresponding features in the pending claims. The attempts at clarification in the Advisory Action, rather than clarifying the discussion, apply a very loose construction to the disclosure of Leuca and to Applicants' claims in an attempt to find corresponding features. This analysis is absolutely in opposition to the mandates of U.S. judicial precedent which assert that in an obviousness analysis, the totality of the disclosure of the reference must be considered for what it would reasonably have instructed to one of ordinary skill in the art. Breaking down Applicants' claims, and breaking down the Leuca reference in the manner done by the Office Action, and the Advisory Action, ignores this basis for an obviousness rejection. For all the reasons set forth in Applicants' September 14 Request, and above, Leuca cannot be relied upon as teaching the allegedly corresponding features that the Office Action, and the Advisory Action, rely on that reference for teaching.

**II. Montebruno Does Not Cure Any Shortfall With Respect to the Application of Leuca to the Subject Matter of the Pending Claims**

First, Applicants do not dispute in the September 14 Request that the range recited in the pending claims, and the range disclosed in Montebruno are overlapping. Rather, Applicants' arguments were directed to indicating why one of ordinary skill in the art would not have been motivated to combine the references in the manner suggested by the Office Action.

Applicants' arguments against the analysis of the Office Action further included that Montebruno was specifically directed at "avoiding traffic saturation in the terrestrial transport network." Based on the inclusion of a terrestrial transport network, NATS, in Leuca and Montebruno's desire to avoid such transport networks by employing satellite systems, one of ordinary skill in the art would not have been motivated to combine the teachings of these systems in the manner suggested by the Office Action.

Applicants note that Montebruno discusses the leasing of similar channels or satellite transponders or parts of the transponders being particularly cost effective. As such, there is no suggestion that one of ordinary skill in the art would have been motivated to provide two-way

communications via a single frequency for transmission and reception of data via a single transponder in a satellite. Rather, multiple channels, multiple transponders and/or multiple satellites are suggested by the disclosure of Monteburno.

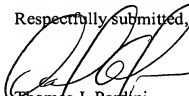
**III. Conclusion**

Applicants believe that, upon review of the Final Rejection, Applicants' September 14 Request, and the Advisory Action, it will be clear that the current rejection of the pending claims is in error.

Applicants respectfully submit, therefore, that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-3, 5-8, 10-13, 15, 16, 18, 19 and 22 are earnestly solicited.

Should the Review Panel believe that anything further would be desirable in order to place this application in even better condition for allowance, all inquiries may be directed to Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



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TJP:DAT/lmf

Attachment:  
Notice of Appeal

Date: October 25, 2007

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